I claim:

1.    A call waiting indicator comprising:

a)    a tone detector associated with a computer having a telephony connection, said tone

5    detector comprising an input for receiving a signal from the telephony connection and a discriminator for identifying a signal indicative of a waiting call; and

b)    a signal generator connected to the tone detector and configured to generate a signal to software resident on the computer upon detection of a call waiting signal, whereby said software can alert a user of the computer via an output device of the computer

10    that a call waiting signal has been detected.

2.    A call waiting indicator according to claim 1, wherein said discriminator comprises an audio signal sampler for sampling said input signal, a sample store for storing a sample call waiting signal, and a matching unit for determining whether a match exists between a sample of the input signal and a stored sample.

15    3.    A call waiting indicator according to claim 1, further comprising a configuration unit for selecting one or more sample signals from a plurality of available signals and for storing said selected signal(s) in said sample store.

4.    A call waiting indicator according to claim 1, wherein said alert generator communicates with the operating system of the computer and comprises a command

20    generator for generating a command to the operating system causing the operating system to generate said alert.

5.    A computer system comprising:

a)    a port for a telephony connection;

b)    a processor;

25    c)    a telecommunications manager for managing the transfer of data between the processor and the port;

d)      a user interface connected to the processor comprising at least an output device capable of issuing an alert to a user;

e)      a tone detector connected to the port, said tone detector comprising an input for receiving a signal from the telephony connection and a discriminator for identifying a signal indicative of a waiting call; and

f)      a signal generator connected to the tone detector and configured to generate a signal when a call waiting signal has been detected, whereby a user of the computer can be alerted to the waiting call.

6.      A computer system according to claim 5, wherein said signal generator communicates with alert generation software resident on the computer, said software comprising instructions effective to recognise a signal from the signal generator and to generate an alert to a user of the computer via said interface.

7.      A computer system according to claim 5, wherein said alert includes an option for the user to terminate an existing data session under the control of the telecommunications manager, and said interface further includes an input device for enabling the user to select said option.

8.      A computer system according to claim 5, further comprising a call control signal generator for outputting a call control signal to said connection to control the remote handling of said waiting call and/or said data session.

9.      A computer system according to claim 5, wherein said output device comprises a loudspeaker and said alert includes an audio alert.

10.      A computer system according to claim 5, wherein said output device is a display unit and said alert is a visible alert displayed on said display unit.

11.      A computer system according to claim 5, wherein said telecommunications manager controls a modem connected to the port and wherein said input to said tone detector is taken the input or output of said modem.

12. A computer system according to claim 5, wherein said tone detector and said signal generator are embodied on a PC card mounted on the computer.

13. A computer program comprising instructions which when executed on a computer are effective to cause the computer to:

5 a) monitor a telephony input signal to the computer during a data transfer between the computer and a telephony connection;

b) detect a signal indicative of a waiting call available from said telephony connection; and

c) upon detection of a signal indicative of a waiting call, generate a signal to the
10 computer whereby an alert can be provided to a user of the computer via an output device of the computer.

14. A computer program according to claim 13, wherein said alert includes a user-selectable option to terminate said data transfer.

15. A computer program according to claim 13, wherein said alert includes a user-
15 selectable option to place said data transfer on hold.

16. A computer program according to claim 13, when embodied in the firmware of a PC card.

17. A computer program comprising instructions which when executed on a computer are effective to cause the computer to:

20 a) monitor a PC card input signal to the computer for a signal indicative of a waiting call detected by the PC card; and

b) upon detection of a signal indicative of a waiting call, generate an alert to a user of the computer via an output device of the computer.

18. A computer program according to claim 17, further comprising instructions effective
25 to cause a computer to present a user with a tool for selecting one or more signals indicative of a waiting call from a plurality of candidate signals accessible from the computer.